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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,324	09/23/2003	Colin C.O. Goble	114632	1642

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EXAMINER	
TOY, ALEX B	

ART UNIT	PAPER NUMBER
3739	

DATE MAILED: 08/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/667,324	GOBLE, COLIN C.O.	
	Examiner	Art Unit	
	Alex B. Toy	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) *11-13 and 19-23* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10 and 14-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/21/03; 6/1/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Species I in the reply filed on August 3, 2005 is acknowledged. The traversal is on the ground(s) that all species are sufficiently related, and that the search would not require a serious burden. This is not found persuasive because a search for Species II-V would require searching class 606, subclass 45, which is not required for searching Species I, found in class 606, subclasses 51-52.

The requirement is still deemed proper and is therefore made FINAL.

Claims 11-13 and 19-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected Species II-V, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on August 3, 2005.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Surgical Forceps with Ceramic Dielectric Coating.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-9 and 14-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Goble et al. (U.S. PGPub 2001/0014804).

Regarding claim 1, Goble et al. disclose a bipolar radio frequency electrosurgical instrument 10 comprising at least first 12 and second 14 electrodes, each of the first and second electrodes having tissue-treatment regions 20 and 24 wherein, in use, current flows in a pathway from the tissue-treatment region 20 of one electrode to the tissue-treatment region 24 of the other electrode, and at least one dielectric element 14 made of a dielectric material 22, the dielectric element having a tissue-contacting portion 24 and being positioned in the current pathway between the tissue-treatment regions of the first and second electrodes. See pg. 3, ¶ 34 and Fig. 1.

In addition, the dielectric element 14 is made of the same ceramic barium titanate material (pg. 4, ¶ 35) that is called for in the specification and in claims 4 and 5. Further, the dielectric element is used with a radio frequency range of 100 kHz to 50 MHz (pg. 3, ¶ 34). Therefore, since the dielectric element of Goble et al. is made of the same material and operated at a frequency in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at 450 kHz. Furthermore, applicant has not disclosed any criticality for this

range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Regarding claim 2, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1, wherein the dielectric element has a reactive impedance of between 700 and 2,500 ohms/sq.mm. at 450 kHz. Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of between 700 and 2,500 ohms/sq.mm. at 450 kHz. Applicant also has not disclosed any criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result. Applicant further states on page 3, line 18 of the specification that it is merely "convenient" for the device to have the stated impedance range.

Regarding claim 3, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claims 1 and 2, wherein the dielectric element has a reactive impedance of between 800 and 2,340 ohms/sq.mm. at 450 kHz. Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of between 800 and 2,340 ohms/sq.mm. at 450 kHz. Applicant also has not disclosed any criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result. Applicant further states on page 3, line 19 of

the specification that it is merely "preferable" for the device to have the stated impedance range.

Regarding claim 4, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1, wherein the dielectric element is made of a ceramic material (pg. 4, ¶ 35).

Regarding claim 5, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claims 1 and 4, wherein the ceramic material is a barium titanate material (pg. 4, ¶ 35).

Regarding claim 6, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1, wherein the dielectric element comprises a dielectric coating 22 at least partially covering the tissue treatment region 24 of one of the electrodes 14 (pg. 3, ¶ 34 and Fig. 1).

Regarding claim 7, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1, having first and second dielectric elements comprising dielectric coatings at least partially covering the tissue-treatment regions of the first and second elements (pg. 3, ¶ 22).

Regarding claim 8, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1, wherein the tissue-treatment region 24 of at least one of the electrodes 14 is completely covered with the dielectric material 22 (pg. 3, ¶ 34 and Fig. 1).

Regarding claim 9, Goble et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1, wherein the tissue-treatment region of both of the electrodes is completely covered with the dielectric material (pg. 3, ¶ 22).

Regarding claim 14, Goble et al. disclose an electrosurgical system for treating tissue, the system comprising a bipolar radio frequency instrument 10 comprising at least first 12 and second 14 electrodes, each of the first and second electrodes having tissue-treatment regions 20 and 24, and an electrosurgical generator adapted to supply a radio frequency output to the electrodes of the instrument at frequency f, such that current flows in a pathway from the tissue-treatment region 20 of one electrode to the tissue-treatment region 24 of the other electrode, and a dielectric material 22, the dielectric material having a tissue-contacting portion 24 and being positioned in the current pathway between the tissue-treatment regions of the first and second electrodes. See pg. 3, ¶ 34 and Fig. 1.

Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency f in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at frequency f. Applicant also has not disclosed any criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Regarding claim 15, Goble et al. disclose an electrosurgical system for treating tissue, the system comprising a bipolar radio frequency instrument 10 comprising at least first 12 and second 14 electrodes, each of the first and second electrodes having

tissue-treatment regions 20 and 24, and an electrosurgical generator adapted to supply a radio frequency output to the electrodes of the instrument at a frequency of 6.79 MHz (pg. 4, Table 1), such that current flows in a pathway from the tissue-treatment region 20 of one electrode to the tissue-treatment region 24 of the other electrode, and a dielectric material 22, the dielectric material having a tissue-contacting portion 24 and being positioned in the current pathway between the tissue-treatment regions of the first and second electrodes. See pg. 3, ¶ 34 and Fig. 1.

Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency of 6.79 MHz in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at a frequency of 6.79 MHz. Applicant also has not disclosed any criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Regarding claim 16, Goble et al. disclose an electrosurgical system for treating tissue, the system comprising a bipolar radio frequency instrument 10 comprising at least first 12 and second 14 electrodes, each of the first and second electrodes having tissue-treatment regions 20 and 24, and an electrosurgical generator adapted to supply a radio frequency output to the electrodes of the instrument at a frequency of 13.56 MHz (pg. 4, Table 1), such that current flows in a pathway from the tissue-treatment region 20 of one electrode to the tissue-treatment region 24 of the other electrode, and a dielectric material 22, the dielectric material having a tissue-contacting portion 24 and

being positioned in the current pathway between the tissue-treatment regions of the first and second electrodes. See pg. 3, ¶ 34 and Fig. 1.

Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency of 13.56 MHz in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at a frequency of 13.56 MHz. Applicant also has not disclosed any criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Regarding claim 17, Goble et al. disclose an electrosurgical system for treating tissue, the system comprising a bipolar radio frequency instrument 10 comprising at least first 12 and second 14 electrodes, each of the first and second electrodes having tissue-treatment regions 20 and 24, and an electrosurgical generator adapted to supply a radio frequency output to the electrodes of the instrument at a frequency of 27.12 MHz (pg. 4, Table 1), such that current flows in a pathway from the tissue-treatment region 20 of one electrode to the tissue-treatment region 24 of the other electrode, and a dielectric material 22, the dielectric material having a tissue-contacting portion 24 and being positioned in the current pathway between the tissue-treatment regions of the first and second electrodes. See pg. 3, ¶ 34 and Fig. 1.

Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency of 27.12 MHz in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at a frequency of 27.12 MHz. Applicant also has not disclosed any

criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Regarding claim 18, Goble et al. disclose an electrosurgical system for treating tissue, the system comprising a bipolar radio frequency instrument 10 comprising at least first 12 and second 14 electrodes, each of the first and second electrodes having tissue-treatment regions 20 and 24, and an electrosurgical generator adapted to supply a radio frequency output to the electrodes of the instrument at a frequency of 40.68 MHz (pg. 4, Table 1), such that current flows in a pathway from the tissue-treatment region 20 of one electrode to the tissue-treatment region 24 of the other electrode, and a dielectric material 22, the dielectric material having a tissue-contacting portion 24 and being positioned in the current pathway between the tissue-treatment regions of the first and second electrodes. See pg. 3, ¶ 34 and Fig. 1.

Again, since the dielectric element of Goble et al. is made of the same material and operated at a frequency of 40.68 MHz in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at a frequency of 40.68 MHz. Applicant also has not disclosed any criticality for this range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eggers et al. (U.S. Pat. No. 5,891,142) in view of Goble et al.

Regarding claim 1, Eggers et al. disclose a bipolar radio frequency electrosurgical instrument comprising at least first 90 and second 92 electrodes (col. 8, ln. 35-37 and Fig. 6), each of the first and second electrodes having tissue-treatment regions 94 and 96 (col. 8, ln. 37-38 and Fig. 6), wherein, in use, current flows in a pathway from the tissue-treatment region of one electrode 90 to the tissue-treatment region of the other electrode 92 (col. 8, ln. 45-48 and Fig. 7), and two dielectric elements 98 and 100 made of a dielectric material (col. 8, ln. 39-43 and Fig. 6), the dielectric elements having tissue-contacting portions and are positioned in the current pathway between the tissue-treatment regions of the first and second electrodes (Figs. 6 and 7).

The claim differs from Eggers et al. in calling for the dielectric element to have a reactive impedance of less than 3,000 ohms/sq.mm. at 450 kHz. Goble et al., however,

teach a dielectric element 14 that is made of the same ceramic barium titanate material (pg. 4, ¶ 35) that is called for in the specification and in claims 4 and 5. Further, the dielectric element is used with a radio frequency range of 100 kHz to 50 MHz (pg. 3, ¶ 34). Therefore, since the dielectric element of Goble et al. is made of the same material and operated at a frequency in accordance with the claimed invention, the dielectric element of Goble et al. inherently has a reactive impedance of less than 3,000 ohms/sq.mm. at 450 kHz. Eggers et al. disclose that the dielectric elements 98 and 100 are made of a ceramic material, but they do not state that it is specifically made of barium titanate (col. 8, ln. 45-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the ceramic dielectric elements of Eggers et al. of specifically barium titanate to give the dielectric elements a reactive impedance of less than 3,000 ohms/sq.mm. at 450 kHz in view of the teaching of Goble et al. because barium titanate is an obvious type of ceramic material to use that is known in the art.

Furthermore, applicant has not disclosed any criticality for this impedance range or that this range uniquely provides an advantage, is used for a particular purpose, solves a stated problem, or shows an unexpected result.

Regarding claim 10, Eggers et al. disclose a bipolar radio frequency electrosurgical instrument according to claim 1 in view of Goble et al., wherein the instrument is in the form of a pair of forceps (Figs. 1 and 6).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

U.S. Pat. No. 5,951,552 to Long et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex B. Toy whose telephone number is (571) 272-1953. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AT AT
8/24/05

MICHAEL PEFFLEY
PRIMARY EXAMINER